



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Sn

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/576,063	05/22/2000	Daisuke Terasawa	PA000307	2817
23696	7590	05/03/2005	EXAMINER	
Qualcomm Incorporated Patents Department 5775 Morehouse Drive San Diego, CA 92121-1714			MEHRA, INDER P	
			ART UNIT	PAPER NUMBER
			2666	

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/576,063	Applicant(s) TERASAWA ET AL.	
	Examiner Inder P Mehra	Art Unit 2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This is in response to an amendment dated 3/14/05 which has been fully considered and made of record. Based on this amendment, Claims 1-9 and 11 have been cancelled, and claims 12-21 have substituted. Claims 12-21 are now pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 12-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Teder et al** (US Patent No. 5,828,659), hereinafter, Teder, in view of **Trandai et al** (US Patent No. 5,893,036), hereinafter, Trandai.

For claim 12 and 17, Teder discloses, in reference to figs. 2-5, "a method for a CDMA communication system" (a communication system, a method for informing a mobile station of a downlink data frame time offset, refer to abstract, and col. 1 lines 8-15), comprising:

- "measuring downlink time offset experienced at a mobile station between downlink transmissions from base stations" (measuring a difference in time between the reception in said mobile station of at least one signal on a common control channel of at least one neighboring base station and a signal on a common control channel from said first base station, refer to col. 14 lines 14-22);

Art Unit: 2666

- “communicating said measured time offset from said mobile station to at least one of said base stations”, (“T.sub.m is reported to the radio network controller RNC”, refer to col. 9 lines 10-11);
- “determining a downlink data frame time offset based on said measured time offset, (“Based on mobile station MS reports of T.sub.m, the radio network controller can update $\lambda_{sub.1}$ and $\lambda_{sub.2}$ continuously to maintain the synchronization of the signals at the mobile station MS”, refer to col. 10 lines 2-5), wherein said downlink data frame time offset is in a multiple of predetermined number of chips (When the traffic channel offset $\lambda_{sub.1}$ is increased, the base station must include a number of dummy chips between two transmitted symbols, refer to col. 10 lines 25-26) ;
- “communicating said downlink data frame time offset information to said mobile station”, (transmitting said communication signal that is to be sent from said first base station and said communication signal that is to be sent from said at least one neighboring base station over first and second call links respectively, refer to col. 14 lines 32-36).
- Transceiver (transmitter and receiver, refer to col. 6 lines 1-2, and 26-28) and controller (system controller, refer to col. 3 line 8, col. 3 lines 17-18, or “Radio Network Controller (RNC), refer to col. 5 line 60).

Teder does not disclose expressly the following limitation, which is disclosed by Trandai, as follows:

- “communicating said downlink data frame time offset information to said mobile station”, “an SACCH downlink includes power control and timing advance commands”, refer to col. 4 lines 1-3. .

It would have been obvious to the person of ordinary skill in the art at the time the invention to use the capability of “communicating said downlink data frame time offset information to said mobile station”, which can be implemented by Base station. The motivation for using this capability being that it facilitates adjustment of delay factor.

For claims 13 and 18, Teder discloses, “wherein said communicating said downlink data frame time offset information is by way of communicating an Active Set Update message” (These measurements are then transmitted through the base stations in the active set, refer to col. 7 lines 54-56).

For claims 14 and 19, Teder discloses wherein said communicating said measured time offset is by way of communicating a measurement report message from said mobile station (refer to step S3 in fig. 4, col. 4 lines 30-32 and col. 7 lines 67-col. 8 line 8.

For claims 15 and 20, Teder discloses, “adjusting timing of a time offset adjuster in said mobile station for adjusting data symbol timing according to said downlink data frame time offset information and for identifying corresponding data symbols for a soft combining operation”, refer to “update time offset”, col. 4 lines 55-57, col. 4 lines 65-67 and col. 5 lines 40-50.

For claims 16 and 21, Teder discloses “soft combining said corresponding data symbols”, refer to soft, refer to col. 6 lines 40-42, combining the corresponding data symbols, refer to col. 5 line 45 and col. 12 lines 12-13.

Response to Arguments

4. Applicant's arguments filed 3/14/05 have been fully considered but they are not persuasive.

Applicant argues “applicant does not find any recitation or suggestion of transmitting the downlink data frame time offset information from a cell to the mobile station”.

- In response, it is stated that Teder discloses “transmitting said communication signal that is to be sent from said first base station and said communication signal that is to be sent from said at least one neighboring base station over first and second call links respectively”, refer to col. 14 lines 32-36.

However, Trandai (US Patent No. 5,893,036) discloses “an SACCH downlink includes power control and timing advance commands”, refer to col. 4 lines 1-3.

In the light of above explanation, arguments by applicant are not persuasive.


Conclusion


5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Inder P Mehra whose telephone number is 571-272-3170. The examiner can normally be reached on Monday through Friday from 8AM to 5PM.

Art Unit: 2666

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Inder P Mehra
Examiner
Art Unit 2666


[Stamp: EXAMINER]
[Stamp: 10/10/2009]